

Title (en)

GLOBAL USAGE TRACKING AND QUOTA ENFORCEMENT IN A DISTRIBUTED COMPUTING SYSTEM

Title (de)

GLOBALE NUTZUNGSVERFOLGUNG UND QUOTENDURCHSETZUNG IN EINEM VERTEILTEN RECHENSYSTEM

Title (fr)

SUIVI D'UTILISATION MONDIALE ET APPLICATION DE QUOTAS DANS UN SYSTÈME INFORMATIQUE RÉPARTI

Publication

EP 3438819 B1 20191225 (EN)

Application

EP 18185232 A 20180724

Priority

- US 201762540759 P 20170803
- US 201715682018 A 20170821

Abstract (en)

[origin: EP3438819A1] This patent document describes systems and methods for tracking the usage of a service provided by a distributed computing platform and for the enforcement of a global quota against such usage. In one embodiment, Servers in the platform are organized in a hierarchical manner. At the lowest tier resides a set of globally distributed servers, any one of which may receive and respond to client device requests. Multiple tiers of aggregation servers sit above the above the delivery tier. The first tier of aggregation servers receive usage measurements from the delivery tier. The second and higher tiers aggregate the usage measurements from lower tiers until a world level tier combines all usage measurements for a given service. Preferably, usage information is passed between servers in synchronization events. The systems and methods described herein are scalable, low latency, fault-tolerant, and incur relatively low computing overhead.

IPC 8 full level

G06F 9/46 (2006.01); **G06F 9/50** (2006.01); **H04L 12/24** (2006.01); **H04L 29/06** (2006.01); **H04L 29/08** (2006.01)

CPC (source: EP US)

G06F 9/465 (2013.01 - EP US); **G06F 9/5077** (2013.01 - US); **H04L 41/0893** (2013.01 - US); **H04L 41/0897** (2022.05 - EP); **H04L 41/5003** (2013.01 - US); **H04L 41/5022** (2013.01 - US); **H04L 67/10** (2013.01 - EP US); **H04L 67/535** (2022.05 - US); **H04L 9/40** (2022.05 - US); **H04L 41/0896** (2013.01 - US); **H04L 67/02** (2013.01 - EP US)

Cited by

CN113391985A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3438819 A1 20190206; **EP 3438819 B1 20191225**; US 10372504 B2 20190806; US 2019042323 A1 20190207

DOCDB simple family (application)

EP 18185232 A 20180724; US 201715682018 A 20170821